

Title (en)
INTRA-ARTICULAR NEEDLE PLACEMENT DEVICE AND METHOD OF USING

Title (de)
INTRAARTIKULÄRE NADELPLATZIERUNGSVORRICHTUNG UND VERWENDUNGSVERFAHREN

Title (fr)
DISPOSITIF DE POSITIONNEMENT D'AIGUILLE INTRA-ARTICULAIRE ET MÉTHODE D'UTILISATION

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Abstract (en)
The present invention relates to a device for measuring, recording, and acting in response to changes in air pressures encountered through the lumen of a connected needle. The device signals when it has been powered and signals when the device recognizes both pressures and pressure change rates indicative of intra-articular or synovial cavity joint penetration, such as knee joint penetration. Synovial cavity pressures detected and acted upon may either be supra- (positive) or sub-atmospheric (negative). Internal light emitting diodes and a laptop connected display are demonstrated as signaling and communication mechanisms. Methods for delivering medicaments into human and animal intra-articular cavities or joints such as synovial cavities are provided. Furthermore, methods for facilitating the diagnoses of joint effusion also are provided.

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